## **ABSTRACT**

A method and system for encryption and decryption of data files on a web-based computer system includes encrypting the data file in a memory subsystem, such as RAM, storing the encrypted data file in one or more of a plurality of memory locations, analyzing and modifying the encrypted data file, retrieving and decrypting the modified data file; and displaying the decrypted data file on a web browser. The computer system may include one to three servers. The data file may be encrypted and decrypted using any dual-key encryption algorithm, such as PGP, or a single key algorithm. Data transmitted into and out of the computer system may be via an SSL/HTTPS protocol to provide additional security.